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ABSTRACT

A constant bit rate single program encoded transport stream is demultiplexed from a statistically multiplexed MPEG transport stream by separating a variable bit rate program from the multiplexed MPEG transport stream, loading the sequence of pictures that form the variable bit rate program into a smoothing buffer at a rate that does not exceed a desired constant bit rate and transferring the picture from the smoothing buffer at times indicated by decode time stamps associated with the pictures respectively. If a picture of the sequence becomes available no later than a specified amount of time prior to the picture's decode time stamp, then that picture is loaded into the smoothing buffer commencing the specified amount of time prior to the time indicated by the picture's decode time stamp. If a picture of the sequence becomes available later than the specified amount of time prior to the picture's decode time stamp, then that picture is loaded into the smoothing buffer as soon as possible.